Environmental Solutions

Assessment - Engineering - Management

ASBESTOS ABATEMENT REPORT

(BUILDING 20)

PREPARED FOR:

MR. JOHNNY MARASCO BOEING REALTY CORPORATION

PREPARED BY:

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OCTOBER 4, 2000

Environmental Solutions

Assessment - Engineering - Management

October 2, 2000 ES Project No: ES00-005.III

> Mr. Johnny Marasco Boeing Realty Corporation 3760 Kilroy Airport Way Suite 500, MC C095-0500 Long Beach, 90806

Class II Asbestos Abatement Monitoring Report Floor Tiles, Floor Mastic and Exterior Wall Panels The Harbor Gateway Project Building 20 Torrance, California

Introduction

Environmental Solutions was retained by Boeing Realty Corporation to monitor and report on the abatement of above mentioned asbestos containing materials from the subject building 20. The abatement work was performed by Tri-State Restorations, Inc. retained by Boeing Realty Corporation. This report presents the results of our observations made during the course of this project to the extent that involved asbestos abatement.

Tri-State removed asbestos-containing corrugated exterior panels from all sides of the subject building, and removed floor tiles and associated mastic (class II abatement) from the offices and the warehouses of the subject building's ground level, between July 10 to July 18, 2000. This work was commenced pursuant to Southern California's AQMD 10 day notification and approval period. The abatement work was substantially completed in seven 10 hour shifts between the hours of 6:00am to 3:30 pm. The work was performed in accordance with the general construction industry standards for class I and class II, asbestos abatement, Federal OSHA 29 CFR 1926.1101 and 8 CCR 1529 for friable and non-friable asbestos-containing materials.

Summary of Observations

Environmental Solutions monitored the mobilization, clean-up, preparations, asbestos abatement, disposal, final visual, air monitoring and demobilization during this project on daily basis. In general the work was performed simultaneously with the abatement work at building 2. The major part of the abatement was the removal and disposal of the asbestos containing corrugated panels on walls and ceiling of the subject building. These panels referred to as "galbestos" were dismantled first by the use of heavy equipment and lowered to the ground. Then stacked and compacted for easy loading and transport. The asbestos-containing floor tiles and associated mastic were abated from all designated areas (as identified by pre-jobwalk) of the said building. The abatement of floor tiles was accomplished by isolating and containing each area of subject floor of the building from the rest of the building and using proper environmental and safety methods/controls as per class II abatement regulations for performance of such work. The associated mastic was abated by a vacuum assisted bead blasting machine for the most part. The mastic @ corners and edges as well as small areas of the floors were abated by chemical removal method. The removed asbestos containing floor tiles were then bagged in non-hazardous plastic bags (clear bags) for proper transport and disposal. The remainder of the beads used for blasting was bagged and transported out as friable asbestos containing materials. A representative (the on-site supervisor) of Tri-State Restorations, Inc. executed the non-hazardous marifest for final transport and disposal by BDC. The asbestos pipe insulations were abated using modified glove-bag methods in accordance with 29 CFR 1926.1101 for Class I asbestos abatement. These materials were bagged in asbestos marked bags and disposed of as hazardous.

Asbestos Abatement Report Boeing Realty Corporation Building #20 Harbor Gateway Project October 2, 2000 Page 2

Tri-State's workers were protected by tyvek protective suits, goggles, gloves, boots, and respirators during the abatement procedures. In general, gas-powered lifting equipment had to be used to access and lower the exterior wall panels and pipe insulations and in doing so, the workers had to be and were protected against fall hazards as well. The concrete floor of the entire building on the ground level was consistently cleaned of all fallen debris during the project.

Ambient air samples were collected, outside of the work areas by Environmental Solutions using low flow air pumps and air clearances were collected by high-flow air pumps (if deemed necessary) through 25 millimeter CE cassettes for NIOSH 7400 "A" counting rule analysis, off-site. Personal samples were collected by Tri-State for OSHA compliance. Visual clearance was achieved in the work areas at the conclusion of the abatement activities and prior to demobilization (see attached field reports). The results of the air samples are presented in Exhibit II of this report.

Conclusion

The analysis results of most of the air samples collected by Environmental Solutions during the abatement activities indicate levels that are below permissible exposure limit set by EPA and Cal-OSHA. Therefore, the abatement work areas of the subject building are released for demolition. This report also serves as a "non-ACM status" letter for building 20 on behalf of Boeing Realty Corporation.

Tri-State's workers medical and asbestos training submittals were reviewed and approved by Environmental Solutions prior to the start of work and will be presented in Tri-State's final report to Boeing Realty Corporation under separate cover. Copies of manifests for materials removed in this building will be presented in the abatement report of building 2.

The following sections are attached and complete this report;

o Exhibit I Field Reports

O Exhibit II Air Sampling Results

Environmental Solutions

Michael Rezvani, REA, CAC Principal Consultant

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EXHIBIT I FIELD REPORTS



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FIELD REPORT

Job No.: \$500 - 205 Project Name BOEING FALTY
Shift Start Date 7/10/2000 Project Location: Bldc 2 \ 20
Contractor: TRI-SIATE Weather Condition: CLEAR & MILD
DESCRIPTION:

ABOUT 4 MEN & ONE SUPERVISOR (GEROLD).
l l
IN THE BLUG 2'S 1 St E 2 ND FLOORS.
11:00 AM THE CREN TAKES WACH BREAK.
OTHER ACTIVITIES LIKE SALVAGING & DEBRIS CLEAN - UP ON
THE NORTH SIDE OF THE BLDG IS IN PROGRESS.
WE COLLECT TWO BACK GROUND AIR SAMPLES.
* 12:00 MOON/ THE CREW RETURNS & ASSUMES THE WORK.
TODAY THERE WILL BE NO ASBESTOS ABATEMENT. ONLY
PREP & CLEAN UP.
- AS USUAL, TWO AIR SAMPLES WERE COULTED FOR
MONITORING PURPOSES FOR SHORT TERM.
TODAY APPROX. 8" LONDS BINS WERE TRANSPORTED OUT. THE
MANIFESTS WERE EXECUTED BY G. ATKERSON FROM TRISTATE.
No secidents with Proportion Today.
MIKE DE -2 VANI
FIELD TECHNICIAN (Print Name) SIGNATURE DATE



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FIELD REPORT

Job No.: <u>ESOO- 025</u>	Project Name BOEING REALTY CORP.
Shift Start Date 7/1/2000	Project Location: But z = zo
Contractor: TEL-STATE	Weather Condition: CLEAR & MILL)
DESCRIPTION:	
* 10:00 AM/ TEL-STATE W/ A C	DREW OF FOUR MEN AN-SITE.
ENVIRO. SOLUTIONS ON SITE.	THE PROJECT STATUS IS AS FOLLOWS
	BATEMENT IN BUY Z IS READY.
A TRI-STATE CREW IS CON	SAIT LUOD DOWN THE
GALBETTOS JUNG OF BU	Du. #20. Today.
	TOPIZED EXCUIPMENT TAKES DOWN THE
	THE SOUTH WALL SHALL REMAIN AS
A. VISUAL BARRIER.	
	GROWD PRIOR TO BEING PICKED UP,
	OR FLAT BEDS.
	WHEH @ THIS TIME.
Envigo . Solutions MAKES A	VISUAL INSPECTION OF BOTH BLOKES.
	TED OF THE NORTH SIDE OF THE
•	S CONPOLED, BUT NO! PHTSICAL
	T
* 12:	00 AM/ TRI-STATE CREW RETURNS &
agh DA PERU	MES WORK @ RIDG ZO
	SAMPLE IS DISMANTLED.
8.	,
MIKE HEZVANI	Tike the same
FIELD TECHNICIAN (Print Name)	SIGN ATURE /DATE



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FIELD REPORT

Job No.:	Project Name BOEING REALTY
Shift Start Date 7/12/2000	Project Location: BLDG 2 \$20
Contractor: TEI-STATE	Weather Condition: CLEAR & MILD.
DESCRIPTION:	
* 10:09 Am/ ENVIRO. SOWTIONS	ON-JITE.
TEL-STATE W/ A CREW OF FILL	
	GISTICS, NO WORK IS BEING
	DEBRIS FROM TESTERNATS
WOLK HAS BESSU CLEANED UP.	
OUR OBSERVATIONS INDICATES;	
	TAIN BREEZEWAT IN BLOG Z
HAS HAD IT'S DEM FLOOR TILES	•
BAGGED & TEMPIN IN THE R	NA.
- NO FURTHER ACM WORK OF T	TLES IS SCHEDULED.
- TRI-STATE WOLKS ON PENS	WAL OF GALBERTON SIDINGS OF
BUDG Z'S N. WEST SECTION (A	COURTARD AREA).
* 11:00 Am / CREW TAKES WHICH	
* 12:00 NOON/ THE CREW RETURN	15 & RESUMES WORK.
THE CREW CONTINUES TO WORK	od Spidge.
NO WEAPPING OF MATERIALS ARE	E TO BE PERFORMED.
4- HO ACCIDENTS WERE REPORT	BD FOR THIS SHIPT.
	STREE ACTIVITIES WERE OBSTRUED.
- TWO AIR SAMPLES WERE C	CONFCIED @ SIDING REMOVAL AREA.
FIELD TECHNICIAN (Print Name)	SIGNATURE/DATE



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FIELD REPORT

Job No.: <u>\$500-005</u>	Project Name BOEING PEAUT
Shift Start Date 7/13/2000	Project Location: Bull 1 220
Contractor: TRI-STATE	Weather Condition: CIEAR & MU WAR
DESCRIPTION:	
* 10105 AM/ ENVIRONMENTAL S	OWTIONS ON-SITE.
TRI-STATE W/ A CREW OF	FIVE MEN ON-SITE.
TODAT THE SUPE OF WORK	S TO COMPLETE THOSE AREAS OF
	WAS LEFT. THE ADATEMENT INCLUDES
	MASTIC FROM THE FIRST & SECOND
	SOUTHERST SECTION OF BUG I.
- NO SIDING ABATEMENT IS	SCHEDULED.
# 11:00 AM TRI-STATE WORK	LERS ARE TERING WHICH. Q THIS
TIME APPROXICIATELY 50% OF	THE ABATEMENT HAS BEEN COMPLETED.
- 12:00 NOON/ THE CREW PATO	
* 1:00 Pm/ ENVIRO. SOUTIONS	
NO ACCIDENTS WERE REPORTED.	
NO ADVERSE CONJUTIONS EXIST	
THE OFFICE AREAS IN BLUG	7 IS CEADED.
MIKE PEZVANI	jik to you
FIELD TECHNICIAN (Print Name)	SIGNATURE/DATE



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FIELD REPORT

Job No.:	Project Name BOEING PEALTY CORP.
Shift Start Date 7/17/ 2000	Project Location:
Contractor: TEI_S ATE	Weather Condition: clear & warm or
GALBESTOS FAMELS. OUR TRI-STATE CREW IS DIVIDED I	ON-SITE. THE SCOPE OF WORKED OF ABATING THE EXTERIOR CORRUGATE ORGENIATIONS INDICATE THE FOLLOWING. NTO TOUR GROUPS.
CENTER NOITH WALLS OF BU	THE GALBESTOS PANELS ON/OF THE 14 1 B/W BLDG Z & 1. ON THE DISMANTLING OF THE GALD
PANELS OF BLOG I IN THE SO DEBRIS B/W BLOG'S 1\$2 P CLEAN-UP. THIS IS DISCUSSED WE PEQUESTED. TRI-STATE TO	SMAIN ON THE GROUND AWAITING W/ TRI-STATE. BARRACADE OF TAPE OFF THE
A NO ACCIDENTS WERE PEPONS	LECTED FOR MONITORING RWAS.
* NO ADVERSE ENVIRONMENTAL * SOOT & DUST CONTINUES TO * 1:05 PM/ ENVIRO. SOLUTIONS	CONDITIONS EXIST. BE A PROBLEM.
FIELD TECHNICIAN (Print Name)	SIGNATURE/DATE



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FIELD REPORT

Job No.:
Shift Start Date 7/18/2000 Project Location: RUG 2 5 20
Contractor: TRI-STATE Weather Condition: CEAR & WARM
DESCRIPTION:
* 10:30 AM TRI-STATE W/ A JEN MAN CREW ON-SITE.
THE SCOPE OF NORK IS TO START & FAST REMOVAL OF THE
EXT. GALBESTOS FAMELS FROM THE SUBJECT BUG.
THE COUNT DIVIDED INTO THREE GROUPS.
A ONE GROUP OF ZHI IS ON HEAVY EQUIPMENT, BRINGING DOWN
THE WEST NORTH WEST WALL. THE APATHWAY B/W BLOG Z & 3 IS
ALMOST BLOCKED BY GARBESTOS WEBELS.
+ ONE CREW IS PUT IN CHARGE OF ABATEMENT OF FLOOR TILES
IN THE OFFICES ALONG THE BREEZ WAY.
ATHE LAST CREW IS PUT IN CHARGE OF THE FAST/ CENTER SECTION &
TO DEMO & LOAD-UP ASSESTED PANEL IN THAT SECTION.
JUST CONTINUES TO BE A MAPR PROBLEM IN THE AREA. AIR
SAMPLES ARE COLLECTED Q UPSTREAM SECTIONS
@ 11:00 Am/ THE TRI-STATE CEEN TAKES WAICH.
@ 12:00 NOON THE CREW REJUMES WORK AT DESCRIBE ABOUTE.
DUPING OUR CIBERNATIONS, NO ACCIDENTS WERE PAPORTED.
AU ARFAI (RWAI) ARE DEMARKATED & RESTRICTED TO TRI-STATE
WOHER!
* 2:00 Pm/ WORK IN THE ABOUT SECTIONS CONTINUE.
ENVIRO. SOLUTIONS CONTINUE.
FIELD TECHNICIAN (Print Name) SIGNATURE/DATE



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FIELD REPORT

Job No.: <u>Esco-co</u> 5	Project Name BOEING REALTY CORP.
Shift Start Date 7/19/2000	Project Location: Bula z & 20
Contractor: TRI-STATE	Weather Condition: UFALE WARM
DESCRIPTION:	
* 10:30 AM TEI-STATE W/A CRE	N OF FIFTEEN ON-SITE.
THE PROJECT STATUS IN ACCORDA.	
	- J ARE ABATING FLOOR TILES &
MANTIC FROM SIFFICES ARONG TH	E BREEZ-MAY IN BUKZ.
A CZEW OF FOUR IS TAKIN	G DOWN THE GALFESTOS SIDING
FROM THE WEST WAU. TWO OF	THE MEN ARE IN CHARGE OF
CLEANING THE DEBAS & PACKAGING	G THE SIDING SHEETS.
	a (PWA) IS DEMARKATED & RESTRICTED.
TRI-STATE SUPERVISOR MAKES	PEGNAR ROUND AROUND THE WORK AREAS
* 11:00 Am/ THE CREW TAKES WHICH E	ENURO. SOLUTIONS DISCUSSES THE
PROJECT PROGRESS N/ TRI-STATES	SUDEVISOR.
* 12:00 NOON/ THE CREW PETURA	is to STATIONS & PEULINEU WOOK.
NON-HAZ BY HAS BEEN PLACED !	WIDE THE BUIG. NEAR THE RWA FOR
FLOOR TILES.	
& DUE TO DEAFT CAUSED BY RE	MOVAL OF THE WALLS MUCH OF THE
DETAMINATED FAINT ON STRUCT	TRAL MEMBERS OF THE BUIG. IS
ON THE FLOOP & CONTINUE TO FA	HI. NO INFORMATION IS AVAILABLE
AS TO THE CONTENTS NATURE OF	- THE PAINT. ENVIRO. SOUTIONS
HOVE RE QUESTED FURTHER PESTS	
* 1:30 Pm/ The AIR SAMPLES WE	es conscien. Es off-site.
FIELD TECHNICIAN (Print Name)	SIGNATURE/DATE

EXHIBIT II AIR SAMPLING RESULTS



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2601 E. Chevy Chase Drive, Glendale, CA 91206

AIR SAMPLE DOCUMENTATION

BLD6 2

JOB NUMBE	R: <u>₹</u> 5∞-	∞ <u>5</u>		PROJE	CT NAME: 🏂	DEING ACM ABATE	CLIENT: BOEN	REALTY
CONTRACTO	TEI-S	TATE		PROJE	CT MANAGER:	MIKE HEZVANI	TECHNICIAN:	
SAMPLE NO	DATE	РИМР #	TIME ON	DURATION	VOLUME	LOCATION	OPERATION	AFC QA/QC READER READER
_A_0l	7/10/2000	HFs_	11:05	40	<u>600</u>	OWA	BACKGROUND	.008 Hu
		10 0/min	12:05			E. OFFICES	AIR SAMPLES	<u>mr</u>
A-02	7/10/2000	# F3	11:05	60	600	OWA	BACKGROUND	.0091 f/cc
		10 0/min	12:05			E · OFFICES	AIR SAMPLES	_m2
			•					·
A-03	7/11/2000	HES	11:04	_30_	300	N. 07	MONITOZING	<01 /a
	·		,			BW4 20		
A_04	7/11/2000					H. B. OF		
		5 P/mi	<u> [[5:1]</u>			BUG 20	Acm	_nr
		-						
						·		
A-05	7/12/2000	· LF4	10:30	60	_180	@ EWA	MONITOPING	•009 f/e
		31/2	11:30			N.W. BUGZ		
A-06	7/12/2000	LFI	10:34	40	180	@ 2NA	MONITORING	.01 f/ce
	' . '		11:34			N.W. KUGZ		
i1		*						



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2601 E. Chevy Chase Drive, Glendale, CA 91206

AIR SAMPLE DOCUMENTATION

BLD9 2

JOB NUMBER						BOEING ACM ABATE JER: MIKE PEZWANI		· ·
SAMPLE NO	•		TIME OF	DURATION		LOCATION	OPERATION	AFC QA/QC READER READER
F0-A	7/13/-	HE4	/2:- /2:30	30_	300	BLUG 7	AIR CLEAR.	<u><.01</u>
A-08	7/13/-	HF3	12:00	30	_3∞_	DEFICE 2ND BLOG 1	AIR CLEAR	
	<u> </u>							
A-09	7/4/-	1F2 3 f/n	<u>10:33</u>	60	180	= owa / w. = BUG 2	MONITORING	0.008) f/4
<u>A-10</u>	-/yk/	3 l/m	10:33	60	_180_	OWA / W. BUG 2 ONA / N. BUX 2	MONITERING	0.0079 /u _MR
<u>A-11</u>	7/13/-	3 P/m	10:3	60	180	ONA UPSTAGA	MOHITOHNY	0.0074 t/u
A-12	7/18/-	LF4		40		BUXG2	MONITOPING	0.0077 5/u



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AIR SAMPLE DOCUMENTATION

2601 E. Chevy Chase Drive, Glendale, CA 91206

BLD42

	•	•			<u>.</u>) CD 4 2		
JOB NUMBE	R: <u>ES00-</u>	005				BORING ACM ABATE		IG PEALTY
CONTRACTOR	TE1-5	TATE		PROJE	CT MANAGE	R: MIKE REZUANI	TECHNICIAN:	
SAMPLE NO	DATE	РИМР #	TIME ON	DURATION	VOLUME	LOCATION	OPERATION	AFC QA/QC READER READER
A-13	7/19/-	<u>LF01</u>	<u> 11:04</u>	40	180_	Upstream	MONITORING	0.012 /4
		3 e/m	12:04			N.W. OF BUG Z		ME
A-14					180	UPSTREAM	MONITORING	0.018 /4
		3 1/2	12:07			N. OF BLUG Z		<u>MP</u>
Muc	H AIR T					& PARTICULATES		
A-15	7/20	<u>ufol</u>	<u> </u>	<u></u>	<u> 180</u>	UPSTREAM	MONITORING	0.00475/4
		3 l/m	12:-			N.W. OF BUYZ	ARATEMENT	<u>mL</u>
A-16		•				UP STREAM		
		3 l/m	13:02			W. OF RUSZ	ABATEMENT	
					· · · · · · · · · · · · · · · · · · ·			
<u>A-17</u>	7/21/-	LFol	11:08	60	160	@ SEWRITY	MONITOHNY	0.010 4/4
			12:03			GATE		_nr
A-18	7/21/-	•			180	@ THE WEST	MONITORING	0,00875/4
	• .	31/2	12:11			END OF Jeap.		

